

Title: Hazardous Materials and Waste Management Plan

Policy #: EOC-03

Purpose:

Materials associated with physical, chemical, radioactive, or biological hazards are commonly used or generated throughout Beth Israel Deaconess Medical Center (BIDMC) normal operations. Many of these substances are essential to operations. The goal of this management plan is to protect all persons, property, and the environment from the risks presented by these hazardous materials.

The objectives and responsibilities included here are intended to ensure that hazardous materials are selected, handled, stored, transported, and disposed safely, and in accordance with applicable regulatory requirements. This applies to any hazardous material, beginning with its receipt or generation at BIDMC or associated locations through its final disposal.

Scope:

The **Hazardous Materials and Waste Management Plan** applies to all properties and facilities owned, occupied, or managed by BIDMC, including clinical, research, and administrative areas on the main campus and at off-site locations. In some cases, certain responsibilities under the **Hazardous Materials and Waste Management Plan** are shared with or delegated to local managers and/or outside parties such as landlords, tenants, or contractors. As applicable to particular locations, the **Hazardous Materials and Waste Management Plan** also covers BIDMC patients, employees, clinical or research staff, and visitors present in these locations.

Policy Statement:

BIDMC programs are developed and implemented to minimize the risks of hazardous materials and to comply with federal, state, and local regulations, as well as accepted industry standards and practices. These programs address issues on the following topics:

- Hazard recognition and communication;
- Product inventory maintenance;
- Labeling;
- Safety data sheet (SDS) management;
- Use of effective hazard controls, implementing the hierarchy of controls;
- Hazardous waste management including safe storage, shipment, and transport;
- Employee training;
- Response to emergencies including spills and exposures [EC-43 Code Orange-Hazardous Spill Response Program](#)
- Continual program assessment and improvement;
- Obtaining and maintaining licenses and permits;
- Wastewater management;
- Exposure monitoring; and
- Management of environmental impacts.

Procedure(s) for Implementation:

General

The specific policies and procedures related to hazardous materials and waste management are maintained in the BIDMC Environment of Care Manual, Chemical Hygiene Plan, Biosafety Manual, Research Safety portal page, and Radiation Safety Manual and procedures. The established procedures apply to hazardous chemicals, chemotherapeutic and other pharmaceutical materials, radioactive materials, infectious materials including sharps, non-sharps, and all hazardous waste products.

BIDMC provides appropriate space and equipment for safely handling and storing hazardous materials and waste and requires that all materials are properly labeled. These hazardous materials and waste areas are restricted and maintained by authorized personnel.

BIDMC maintains all required permits and licenses pertaining to hazardous materials and wastes. All wastes are disposed of according to federal, state and local regulatory requirements. Documentation is maintained accordingly.

Responsibilities

Environmental Health and Safety (EH&S) Department

Responsible for coordination of chemical hazard management, including chemical wastes, and for maintaining appropriate documentation, permits, and licenses for use, storage, and disposal.

The Environmental Health and Safety Department's duties shall include:

- Serving as the medical center's Chemical Hygiene Officer in accordance with OSHA's Hazard Communication Standard (1910.1200);
- Coordinating this plan with other personnel having primary programming and/or operational responsibilities pertinent to hazardous materials management;
- Taking the primary lead for the management of hospital-wide issues relative to hazardous chemical waste except infectious/biological waste and radioactive waste;
- Serving as Code Orange: Hazardous Material Spills incident coordinators to effectively manage a chemical spill;
- Coordinating appropriate off-site disposal of all hazardous chemical waste and maintaining waste manifests. Radiation Safety manages radioactive and mixed chemical/radioactive waste;
- Developing policies and procedures to implement this plan as needed;
- Providing education to staff, contractors, patients (if applicable) of hazards associated with hazardous chemical materials;
- Maintaining SDS on-line database and back-up files;
- Assist in the coordination of proper handling, management and disposal of all patient decontamination related material or waste
- Assisting Maintenance Operations to ensure compliance with all waste water permit requirements
- Communicating with managers/supervisors to ensure the implementation of best practices and compliance with applicable regulations and standards
Providing training and technical assistance to staff;

- Measuring program effectiveness and implementing improvements where necessary;
- Reporting program proceedings on an established schedule to the Environment of Care Committee (EOCC);
- Providing program summaries in annual program evaluations and reports;
- Coordinating routine and non-routine environmental/employee exposure monitoring; and
- Fulfilling regulatory reporting and permitting responsibilities.

Environmental Services Department

Responsible for maintaining BIDMC guidelines on hazardous infectious waste, in collaboration with Infection Control, as defined by the MA DPH. Responsible for the management and coordination of infectious waste disposal, including sharps/non-sharps, and chemotherapeutic waste (excluding those managed by EH&S as hazardous chemical waste), and for maintaining appropriate manifests, permits, licenses, and any other documentation required by regulatory agencies.

Radiation Safety Department

Radiation Safety, under the direction of the Radiation Safety Committee, is responsible for radiation safety in compliance with the BIDMC Radioactive Materials Licenses and Registrations. These responsibilities include managing the purchase, storage, use, general management and disposal of radioactive materials and radiation sources, monitoring exposure to radiation sources and maintaining licenses, permits, policies and records related to radiation safety. Serve as Code Orange Hazardous Material Spills incident coordinator to effectively manage the spill in the instance of a radioactive material spill.

Pharmacy Department

The Pharmacy Department will assist the Environmental Health and Safety Director in the management of drug waste which is regulated under the Resource Conservation and Recovery Act (RCRA). Disposal of non-RCRA regulated chemotherapeutic waste will be coordinated through the Environmental Services director. Expired drug disposal will be coordinated through the Pharmacy purchasing group. All RCRA regulated waste will be placed in black RCRA containers and will be collected by EH&S for disposal. All appropriate permits, licenses, and any other required documentation will be maintained by the respective departments (Pharmacy, EVS and EH&S).

Maintenance Operations Department

The Maintenance Operations Department is responsible for the proper collection and disposal of universal waste (including spent light bulbs, lighting ballasts, anti-freeze, and waste oil). This includes proper storage, labeling, and disposal. Maintenance Operations is also responsible for monitoring and maintaining the operation of all waste water treatment systems throughout the campus. Maintenance Operations provides all supporting documentation of daily inspections including pH and flow logs to EH&S for compliance submittals.

Facilities Planning Design and Construction Department

Responsible for ensuring the proper identification, removal, collection and disposal of all hazardous construction project-related materials (fuel, asbestos, lead etc). This includes proper storage, labeling. Disposal shall be coordinated with EH&S.

Coordination with EH&S to ensure proper management of hazardous materials prior to any build-out/renovation as applicable.

Maintenance, Environmental Health and Safety, and Planning Design and Construction Departments

Jointly responsible for ensuring:

- All asbestos and presumed asbestos containing materials (ACM & PACM) are handled, sampled and disposed of in accordance with all regulatory requirements and BIDMC Asbestos Management Program EC-66.
- Sampling for any other regulated materials will be handled, sampled and disposed of in accordance with all regulatory requirements prior to any removal (e.g. lead, PCBs).

Environment of Care Committee (EOCC)

EOCC duties shall include:

- Ensuring the adequacy of hazardous materials management policies and programming;
- Monitoring program performance;
- Reviewing incidents and summary reports and recommending program improvements.

Department Managers, Supervisors, Principal Investigators, and Lab Managers

Department managers, supervisors, and principal investigators and lab managers are key persons in the Hazardous Materials Management program and are accountable for meeting all the requirements of applicable standards for their areas. Management responsibilities shall include:

- Ensuring employee safety, and compliance with applicable policies and procedures developed under this plan;
- Assessing the risks presented by the generation or use of hazardous materials in departmental operations and seek safer alternatives whenever possible;
- Involving EHS when selecting new hazardous chemicals for use in processes.
- Developing and maintaining department-wide and job-specific safety and emergency procedures relative to hazardous materials;
- Maintaining department-specific compliance with hazardous waste policies;
- Implementing the BIDMC Hazardous Communication Program, as established in BIDMC Chemical Hygiene Plan (CHP), in their departments and attaching department-specific SOPs to the CHP where appropriate;
- Maintaining a current and department-specific hazardous chemical inventory, understanding how to access SDS on-line and review annually, and maintaining the hazardous chemical inventory (it is recommended to send to EH&S annually)
- Providing job-specific safety training prior to initial handling of hazardous material or generation of a hazardous material waste, upon change in job function, and annually thereafter;
- Providing employees with protective safety equipment as appropriate, ensuring that they are instructed in its proper use, and ensuring that such equipment is utilized when specified;
- Communicating results of exposure monitoring and any necessary operational modifications to staff;
- Ensuring the appropriate handling and disposal of all hazardous materials, in accordance with this management plan;

- Ensuring that all select recyclable materials are handled, stored, and disposed of correctly as described in the Hazardous Chemical Waste Policy and Universal Waste Management Plan.

Employees

Employees' responsibilities shall include:

- Upon identifying an unsafe condition or hazard, immediately correcting the problem, if it is within their ability, or otherwise reporting it to the best resource likely to handle the situation (activate Code Orange reference policy);
- Knowing how to access the SDS for chemicals used in the workplace (examples: SDS on-line program or local binder)
- Following safe practices as outlined in established operating procedures;
- Completing all mandatory and non-mandatory training programs and effectively applying such material as taught;
- Seeking clarification from managers or BIDMC officials when unsure of proper procedure;
- Using prescribed equipment for the job and using it in accordance with all safety instructions;
- Wearing assigned protective equipment when instructed or when a hazardous environment is present; and
- Abiding by all safety rules and practices and taking an active part in fulfilling his/her role in the safety program.

Effectiveness

As part of this hazardous materials management program, the objectives, scope, performance, and effectiveness of the plan and its supporting documentation will be reviewed and evaluated annually by the EOC Committee. Needed revisions will be recommended, approved, and implemented regularly.

Approved By:

Vice President Sponsor:

Walter Armstrong, Sr. VP Capital Facilities and Engineering

Senior Management Team: 4/29/19

**Peter Healy
President**

EOC Committee: 2/13/19

**W. Armstrong & K. Murray
Co-Chairs**

Requestor Name: Gary Schweon, Director EH&S

Original Date Approved: 6/98

Next Review: 2/20

Revised: 6/01, 8/04, 9/05, 12/06, 2/07, 1/08, 3/09, 4/10, 5/11, 10/12, 9/13, 1/15, 1/16, 1/17, 1/18, 2/19